

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,464	05/24/2004	Takeshi Sakamoto	118870	9230
25944 OLIFF & BER	7590 10/22/2007 RIDGE PLC		EXAMINER	
P.O. BOX 320850			WONG, EDNA	
ALEXANDRI	A, VA 22320-4850		ART UNIT	PAPER NUMBER
•			1795	
	•			
			MAIL DATE	DELIVERY MODE
			10/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/788,464	SAKAMOTO ET A	SAKAMOTO ET AL.			
Office Action Summary	Examiner	Art Unit				
	Edna Wong	1795				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet w	ith the correspondence ad	dress			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNI 16(a). In no event, however, may a rill apply and will expire SIX (6) MO cause the application to become A	CATION. reply be timely filed NTHS from the mailing date of this or BANDONED (35 U.S.C. § 133)				
Status						
1)⊠ Responsive to communication(s) filed on 10 Se	eptember 2007		. •			
	action is non-final.					
·	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E		•				
Disposition of Claims						
4)⊠ Claim(s) <u>1,3 and 5-10</u> is/are pending in the app	lication.					
4a) Of the above claim(s) is/are withdraw			•			
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1,3 and 5-10</u> is/are rejected.	•					
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers		·				
9) The specification is objected to by the Examiner	•					
10) The drawing(s) filed on is/are: a) acce		by the Examiner	· •			
Applicant may not request that any objection to the o		•				
Replacement drawing sheet(s) including the correcti	A Company of the Comp	• •	FR 1.121(d).			
11) The oath or declaration is objected to by the Ex	aminer. Note the attache	d Office Action or form PT	TO-152.			
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign	priority under 35 U.S.C.	& 119(a)-(d) or (f)				
a)⊠ All b)□ Some * c)□ None of:		3 (4) (4) 5. (.).	•			
1. Certified copies of the priority documents	s have been received.					
2. Certified copies of the priority documents		Application No				
3. Copies of the certified copies of the prior			Stage			
application from the International Bureau	(PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of	of the certified copies no	received.				
· .						
Attachment(s)			•			
1) Notice of References Cited (PTO-892)	4) Interview	Summary (PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No	(s)/Mail Date				
Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date:	5) Notice of Other:	Informal Patent Application				

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 3, 2007 has been entered.

This is in response to the Amendment dated September 10, 2007. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Response to Arguments

Claim Rejections - 35 USC §103

JP 2002-212775 ('775) [Oshima] in combination with **Du Rose et al.** (US Patent No. 3,183,067).

With regards to claim **2**, the rejection under 35 U.S.C. 103(a) as obvious over JP 2002-212775 ('775) in combination with Du Rose et al. has been withdrawn in view of Applicants' amendment. Claim 2 has been cancelled.

Application/Control Number: 10/788,464

Art Unit: 1795

claims result in unexpected and superior results over methods with compositions different from the claimed compositions and outside of the specified ranges.

In response, the Examiner deems that the prior art methods with compositions are not deemed to be different from the claimed compositions and outside of the specified ranges because:

Claim 1 recites:

A method of manufacturing a rare-earth magnet, comprising the steps of:
electroplating a first protective film including nickel on a magnet body including a
rare-earth element with a first plating bath of water solution substantially not including a
ligand which complexes nickel, the first plating bath including a nickel source, a
conductive salt and a pH stabilizer, and having a concentration of the nickel source of

0.3 mol/l to 0.7 mol/l on a nickel atom basis and a conductivity of 80 mS/cm or over,
the nickel source selected from the group consisting of nickel sulfate, nickel chlorides
and nickel bromides and a pH stabilizer selected from the group consisting of boric acid,
sodium borate, potassium borate, lithium borate and magnesium borate; and

forming a second protective film including nickel and sulfur on the first protective film.

Claim 9 recites:

A method of manufacturing a rare-earth magnet, comprising the steps of: electroplating a first protective film including nickel on a magnet body including a rare-earth element with a first plating bath of water solution substantially not including a ligand which complexes nickel, the first plating bath including 0.3 mol/l to 0.7 mol/l of nickel ions, at least one ion selected from the group consisting of sulfate ions, chlorine ions, and bromine ions, at least one ion selected from the group consisting of sodium ions, potassium ions, lithium ions and magnesium ions, at least one ion selected from the group consisting of borate ions, and semi-brightener and having a conductivity of 80 mS/cm or over, and

forming a second protective film including nickel and sulfur on the first protective film.

Applicants have not shown that the plating baths disclosed by JP '775 do not have a conductivity of 80 mS/cm or over, and the Examiner maintains that it would have

Application/Control Number: 10/788,464

Art Unit: 1795

With regards to claims *1, 3 and 5-8*, the rejection under 35 U.S.C. 103(a) as obvious over JP 2002-212775 ('775) in combination with Du Rose et al. is as applied in the Office Actions dated November 15, 2006 and May 9, 2007 and incorporated herein. The rejection has been maintained for the following reasons:

Applicants state that Oshima <u>does not disclose a first plating bath of water</u> <u>solution substantially not including a ligand which complexes nickel</u>. Oshima teaches oxycarboxylic acids acting as buffers. Oxycarboxylic, however, is a ligand which complexes with nickel, as is well known in the art. Thus, Oshima neither teaches a pH stabilizer selected from the group positively recited in claim 1 nor a first plating bath of water solution substantially not including a ligand which complexes nickel, as recited in claims 1 and 9.

In response, the claim language of "substantially not including a ligand" does not exclude an oxycarboxylic acid from being in the first plating bath.

The transitional term "comprising", which is synonymous with "*including*", "containing", or "characterized by", is inclusive or open-ended and does not excludes additional, unrecited elements or methods steps (MPEP § 2111.03)

The term "substantially" is a broad term (MPEP § 2173.05(b)(D)).

Oshima teaches using 0 to 15 g/l boric acid (abstract; page 1, [0002]; and page 3, [0009]).

Applicants state that the combination of all of the features recited in the pending

been obvious to add a sulfur compound to the second plating bath to form a second protective film including sulfur in view of Du Rose.

The presently claimed compounds and concentrations overlap with the prior art, thus, the combination of all of the features recited in the pending claims would have been obvious in view of the prior art.

11. Claims 9 and 10 have been rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2002-212775 ('775) in combination with Du Rose et al. (US Patent No. 3,183,067) and Martin (US Patent No. 2,986,501).

The rejection of claims 9 and 10 under 35 U.S.C. 103(a) as being unpatentable over JP 2002-212775 ('775) in combination with Du Rose et al. and Martin is as applied in the Office Action dated May 9, 2007 and incorporated herein. The rejection has been maintained for the reasons as discussed above.

Applicants' remarks have been fully considered but they are not deemed to be persuasive.

Response to Amendment

Declaration

The declaration under 37 CFR 1.132 filed September 10, 2007 is insufficient to overcome the rejection of claims 1-3 and 5-10 based upon specific references applied under 35 USC § 103 as set forth in the last Office action because Tables 1 and 2 show Art Unit: 1795

results from using concentrations outside the presently claimed ranges but fail to show where the prior art conditions fall within these results and concentrations.

Claim Rejections - 35 USC § 112

I. Claims 1, 3 and 5-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 1 and 9

lines 4-5, recites "water solution substantially not including a ligand which complexes nickel".

Applicants' specification, pages 1-31, does not mention a water solution substantially not including a ligand which complexes nickel. Thus, there is insufficient written description to inform a skilled artisan that applicant was in possession of the claimed invention as a whole at the time the application was filed (MPEP § 2173.05(i)).

The Examiner has carefully considered the entire specification as originally filed, however, there is found no literal support in the specification for the newly added limitations in amended claims 1 and 9. Applicants have not provided the page number and line numbers from the specification as to where the newly added limitations are coming from. *Ex parte Grasselli*, 231 USPQ 393 (Bd. App. 1983) *aff'd mem.* 738 F.2d

Art Unit: 1795

453 (Fed. Cir. 1984).

II. Claims 1, 3 and 5-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1

line 10, it appears that "a pH stabilizer" is the same as the pH stabilizer recited in claim 1, line 6. However, it is unclear if it is. If it is, then it is suggested that the word "a" be amended to the word -- the --.

Claim 9

lines 9-10, recites "at least one ion selected from the group consisting of borate ions, and semi-brightener". The alternative expression of the Markush group is improper (MPEP § 2173.05(h)) because the semi-brightener is not an ion.

Claim 10

lines 7-8, recites "at least one ion selected from the group consisting of borate ions". The alternative expression of the Markush group is improper (MPEP § 2173.05(h)) because borate ions alone are not a group of species.

Any inquiry concerning this communication or earlier communications from the

Art Unit: 1795

examiner should be directed to Edna Wong whose telephone number is (571) 272-1349. The examiner can normally be reached on Mon-Fri 7:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Edna Wong V Primary Examiner Art Unit 1795

EW October 19, 2007